58.   (New) A method for mapping a texture onto a surface of a computer generated object comprising the steps of:

    approximating a true pixel color by performing a number of texturing operations, said texturing operations being determined by a geometric shape of a projection of a pixel on the texture; and

    averaging results of said texturing operations.

59.   (New) A method as set forth in claim 58, wherein each of said texturing operations comprises:

    accessing a mipmap at least one time; and

    responding to multiple accesses being performed by, interpolating results of the accesses.

60.   (New) A method as set forth in claim 59, wherein said number of texturing operations is a power of two.

61.   (New) A method as set forth in claim 60, wherein said number of texturing operations is less than or equal to a predetermined limit.

62.   (New) A method as set forth in claim 59, wherein the texture represents a reflected environment.

63.   (New) A method as set forth in claim 59, further comprising modifying a specularly reflected light intensity on the surface by combining said specularly reflected light intensity with a specular reflectance coefficient, said specular reflectance coefficient being retrieved from a specular reflectance coefficient map associated with the surface.

64.   (New) A method as set forth in claim 63, wherein combining said specularly reflected light intensity with a specular reflectance coefficient comprises multiplying said specularly reflected light intensity by the specular reflectance coefficient.

1   65.   (New) A method for modifying a specularly reflected light intensity on [the] a surface

2   of a computer generated object, comprising:

3   combining the specularly reflected light intensity with a specular reflectance

4   coefficient, said specular reflectance coefficient being retrieved from a specular reflectance

5   coefficient map associated with the surface.

1   66.   (New) A method as set forth in claim 65, wherein combining the specularly reflected

2   light intensity with the specular reflectance coefficient comprises multiplying the specularly

3   reflected light intensity by the specular reflectance coefficient.

1   67.   (New) A texturing unit for mapping a texture to a surface of a computer generated

2   object, which texture comprises a mipmap, which mipmap comprises a plurality of levels,

3   each of which levels comprises at least one texel, the texturing unit comprising:

4   a control unit for receiving an input signal and determining a set of N footprint

5   texel locations and at least one footprint level of detail from the input signal, which

6   input signal includes information about a location and a shape of a projection of a

7   pixel on the texture;

8   a Random Access Memory (RAM) coupled to the control unit for storing

9   information representing the texture, receiving the set of N footprint texel locations

10   and the footprint level of detail from the control unit, and determining N sets of texel

11   values, where each set of texel values is associated with one footprint texel location,

12   and where each set of texel values includes at least one texel value;

13   an interpolator coupled to the RAM, for accepting from the RAM the N sets of

14   texel values and interpolating N interpolated values therefrom;

15   an averaging unit coupled to the interpolator for accepting from the

16   interpolator the N interpolated values and determining an averaged value therefrom;

17   and

18   an output port coupled to the averaging unit, for transmitting the averaged

19   value to a device coupled to the output port.

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1 68. (New) The texturing unit of claim 67, further comprising:

2   a mipmap generation unit, coupled to the RAM, for accepting a changing video

3 image, for generating a generated mipmap in real-time based on the changing video

4 image, and for putting the generated mipmap into the RAM.

1 69. (New) The texturing unit of claim 68, wherein the changing video image is an interlaced

2 video image and the texturing unit further comprises:

3   a memory coupled to the mipmap generation unit for holding an interlaced half-

4 frame of the interlaced video image.

1 70. (New) The texturing unit of claim 68, wherein the mipmap generation unit calculates

2 each level of the generated mipmap incrementally based on available information from the next

3 level of higher detail.

1 71. (New) An electronically-readable medium storing a program for permitting a computer

2 to perform a method comprising:

3   approximating a true pixel color by performing a number of texturing operations, said

4 texturing operations being determined by a geometric shape of a projection of a pixel on the

5 texture, each of said texturing operations including accessing a mipmap at least one time in a

6 marching direction corresponding to the geometric shape of the projection of the pixel on the

7 texture; and

8   averaging results of said texturing operations.

1 72. (New) An electronically-readable medium storing a program for permitting a computer

2 to perform a method for modifying a specularly reflected light intensity on a surface of a

3 computer generated object, the method comprising:

4   combining the specularly reflected light intensity with a specular reflectance coefficient,

5 said specular reflectance coefficient being retrieved from a specular reflectance coefficient map

6 associated with the surface.